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Notice of Allowability

Application No.

10/789,986

Examiner

April Y. Shan

Applicant(s)

HAYASHI, JUNICHI

Art Unit

2135

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 15 November 2007.
2. ☒ The allowed claim(s) is/are 1,3,4,6-14,20 and 23.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☒ SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☒ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☒ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. The Applicant's amendment, filed 15 November 2007, has been received and entered into the record, and respectfully and carefully considered.
2. As a result of the amendment, claims 1, 3, 20 and 23 have been amended; claims 2, 5 and 26 are canceled; claims 15-19, 21-22, 24-25 and 27-28 are withdrawn. Therefore, claims 1, 3-4, 6-25 and 27-28 are pending in this application.

Claim Objections

3. As a result of the amendment to the claims, the examiner withdraws the pending claim objection.

Claim Rejections - 35 USC § 112

4. As a result of the amendments to the claims, the examiner withdraws the pending claim rejection under 35 U.S.C. § 112.

Claim Rejections - 35 USC § 101

5. As a result of the amendments to the claims, the examiner withdraws the pending claim rejection under 35 U.S.C. § 101.

EXAMINER'S AMENDMENT

6. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee. Authorization for this examiner's

amendment was given in a telephone interview with Mr. Brian Klock (Registration No. 36,570) on 18 January 2008. The amendments are to overcome minor informalities and to cancel non-elected claims. As per MPEP 713.04, a separate interview summary form is not provided because the content of the interview has been summarized herein.

The application has been amended as follows:

IN THE CLAIMS:

Claims 15-19, 21-22, 24-25 and 27-28 (Cancelled)

Claim 1 (Currently Amended) An image data encryption method of encrypting encoded image data which is constituted by a plurality of encoded data blocks, comprising:

a step of inputting ~~a data block~~ one of the plurality of encoded data blocks;

a determination step of determining whether the data block inputted in said inputting step is an object to be encrypted;

an encryption step of encrypting the data block when it is determined in the determination step that the data block as-is the object to be encrypted;

a discrimination step of discriminating whether the data block is an object to be reproduced at a decoder in a scrambling mode or in a non-scrambling mode; and

an addition step of adding terminating information to a starting position of the data block encrypted in the encryption step if it is discriminated in the

discrimination step that the data block is an object to be reproduced in the non-scrambling mode, and adding the terminating information to an ending position of the data block encrypted in the encryption step if it is discriminated in the discrimination step that the data block is an object to be reproduced in the scrambling mode, wherein the terminating information is used to notify the decoder to not perform decoding for the subsequent data to the end of the data block.

Claim 20 (Currently Amended) An image data encryption apparatus for encrypting encoded image data which is constituted by a plurality of encoded data blocks, comprising:

input means for inputting data block- one of the plurality of encoded data blocks;

determination means for determining whether the data block inputted by said input means is an object to be encrypted;

encryption means for encrypting the data block when said determination means determines that the data block is the object to be encrypted;

discrimination means for discriminating whether the data block is an object to be reproduced at a decoder in a scrambling mode or in a non-scrambling mode; and

addition means for adding terminating information to a starting position of the data block encrypted by said encryption means if it is discriminated by said

discrimination means that the data block is an object to be reproduced in the non-

scrambling mode, and adding the terminating information to an ending position of the data block encrypted by said encryption means if it is discriminated by said discrimination means that the data block is an object to be reproduced in the scrambling mode, wherein the terminating information is used to notify the decoder to not perform decoding for the subsequent data to the end of the data block.

23. (Currently Amended) A computer-readable storage medium embodying a computer program for causing an apparatus to function which functions as an image data encryption apparatus for encrypting image data which is constituted by a plurality of encoded data blocks, characterized by functioning as:

input means for inputting data block one of the plurality of encoded data blocks;

determination means for determining whether the data block inputted by said input means is an object to be encrypted;

encryption means for encrypting the data block when said determination means determines that the data block is the object to be encrypted;

discrimination means for discriminating whether the data block is an object to be reproduced at a decoder in a scrambling mode or in a non-scrambling mode; and

addition means for adding terminating information to a starting position of the data block encrypted by said encryption means if it is discriminated by said discrimination means that the data block is an object to be reproduced in the non-scrambling mode, and adding the terminating information to an ending position of the

data block encrypted by said encryption means if it is discriminated by said discrimination means that the data block is an object to be reproduced in the scrambling mode, wherein the terminating information is used to notify the decoder to not perform decoding for the subsequent data to the end of the data block.

Reason for Allowance

7. The following is the Examiner's statement of reasons for allowance: Applicant's arguments submitted on 15 November 2007 were considered persuasive – the prior art does not teach the limitations which have been amended onto independent claims 1, 20 and 23. The closest prior art fails to disclose the features of discriminating whether a data block is an object to be reproduced at a decoder in a scrambling mode or in a non-scrambling mode, and adding terminating information to a starting position of an encrypted data block if it is discriminated that the data block is an object to be reproduced in the non-scrambling mode, and adding the terminating information to an encoding position of the encrypted data block if it is discriminated that the data block is an object to be reproduced in the scrambling mode.

The examiner further notes that as per claim 23, which was previously rejected under 35 USC 101 due to a computer program without a computer-readable medium to be stored. In the amendment, the Applicant adds "computer-readable storage medium embodying a computer program..." in order to overcome the rejection. The examiner reviewed the original specification [0198], the Applicant discloses "normally, the computer program is recorded in a computer-readable storage medium such as a CD-ROM. When the storage medium is set in the computer...". Therefore, the computer-readable storage medium as claimed refers to a hardware computer-readable storage medium.

Allowable Subject Matter

8. Claims 1, 3-4, 6-14, 20 and 23 are allowed.

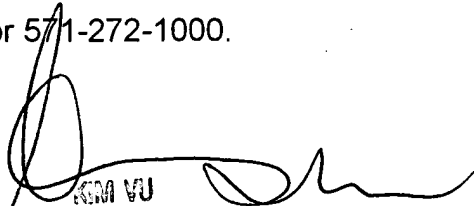
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to April Y. Shan whose telephone number is (571) 270-1014. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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18 January 2008
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